

REMARKS

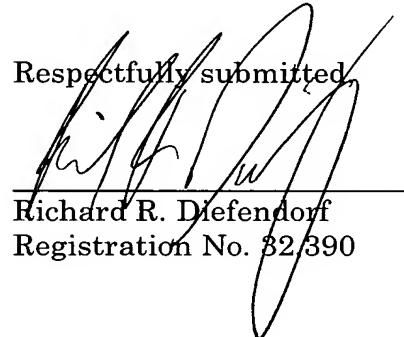
This preliminary amendment provides a substitute specification, an amended abstract, and a new set of claims.

A marked-up version of the substitute specification, showing additions to the translation by underlining and deletions from the translation by strike-through, is attached as Appendix III. The substitute specification includes no new matter.

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CROWELL & MORING LLP
Intellectual Property Group
P.O. Box 14300
Washington, DC 20044-4300
Telephone No.: (202) 624-2500
Facsimile No.: (202) 628-8844
RRD:msy

Respectfully submitted,


Richard R. Diefendorf
Registration No. 32,390

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DaimlerChrysler AG

Angular joint of a window frame of a motor vehicle door ANGULAR JOINT OF A
WINDOW FRAME OF A MOTOR VEHICLE DOOR

BACKGROUND AND SUMMARY OF THE INVENTION

[0001] The This invention relates to an angular joint of a window frame of a motor vehicle door ~~as claimed in the preamble to patent claim 1.~~

[0002] Such an angular joint is known, for example, from German document DE 199 47 209 A1. In the case of an angular joint of this type, difficulties and a relatively high production cost are created, in practice, in establishing a transition between the at least one profile and the angular joint element, which transition is invisible from the outside.

[0003] The invention concerns itself with the problem of furnishing an improvement in this regard.

[0004] This problem is solved by a design of an angular joint of the generic type according to the ~~characterizing features of patent claim 1~~ invention.

[0005] Advantageous and expedient designs are the subject of ~~the~~ subclaims dependent claims.

[0006] The invention is based on the general notion of providing at least one of the two profiles to be joined together with a paneling, which extends into the corner region of the window frame and by which a substantial region can remain fully concealed to the outside. The remaining residual region can be outwardly covered by an additional screen. Facing the vehicle interior, the angular profile and the transitions from this to tied frame profiles are covered by an internal frame trim and door seals.

[0007] In order to provide firm footing for the external paneling extending into the corner region of the frame, against the support profile thereof, a part-region of the profile can overlap the angular profile, running in the longitudinal direction of the profile. In this overlap region, an angular profile, which is inserted into the support profile in a positive-locking and non-positive-locking arrangement, can additionally be fixed. This fixing can be realized by welding in place.

[0008] Particularly advantageous is an embodiment in which the external paneling is integrated in the profile to be joined and the support extending therefrom in a one-piece construction of paneling, support and profile to be joined.

[0009] The angular profile can be configured as a stand-alone component, especially a metal casting, at both ends of which there is tied a frame profile.

[0010] Also falling within the scope of the invention, however, is an embodiment in which the angular profile is an already integrated, one-piece component part of a frame profile extending into a window frame corner region, i.e. on which, according to the invention, only one more single frame profile can then be tied.

[0011] An illustrative embodiment of the invention is represented in the ~~drawing, in which:~~ drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012] ~~fig.~~ Figure 1 shows a view of an angular joint for a door frame, from the inside, and

[0013] ~~fig.~~ Figure 2 shows a view of this angular joint from the outside.

DETAILED DESCRIPTION OF THE INVENTION

[0014] Of the two embodiments of an angular profile which have been set out above, as an illustrative embodiment only that one is described in which the angular profile serves as a joining element for two profiles mutually abutting in a corner region. In the other embodiment, one of the two joining regions is quite simply eliminated, since the angular profile is already an integral component part of one of the two profiles to be joined together.

[0015] Two continuously cast aluminum profiles 1, 2, meeting in a corner of a window frame of a motor vehicle door, which corner is situated high-up on the B-pillar, for example, of a motor vehicle, are joined together by a metal angular profile 3.

[0016] The joining consists in the fact that the angular profile 3, by the insertion of joining regions, provided at its ends, into a respective adjacent longitudinal cavity in the profiles 1, 2, is joined to these in a positive-locking and non-positive-locking arrangement. In order to enhance the force closure, slot welds can be provided in envisaged slotted regions 4, 5 of the profiles 1, 2.

[0017] The profile 1 representing the upper horizontal window region is provided with an external paneling 6, which juts out over the angular profile 3. Over the height of the profile 1, the paneling 6 encompasses only an upper part-region, whereas a lower part-region 7 of the profile 1 serves to receive a window frame seal profile.

[0018] In order to provide the paneling 6 on the profile 1 with additional footing, in the form of a support, in the region of the angular profile 3, a part-region 8 jutting over the angular profile 3 is provided on the profile 1. In this part-region 8 of the profile 1, an additional slot weld 9 can be provided between

the angular profile 3 and the profile 1 in order to obtain an additional force closure.

[0019] The external cladding of the window frame profile 2 extending in the vertical axis can be realized by a screen (not represented in the drawing), which can be screwed, for example, on the profile 2. In the region in which this screen butts against the external paneling 6, a seal-filled seam can be provided.

[0020] If the paneling 6 is integrated into the profile 1, which is possible according to the invention, the paneling 6, the profile 1 and the support extending from the profile 1 are a single, one-piece component, i.e. are configured in one piece, totalling the components 1, 6, 7 and 8.

[0021] The angular joint construction according to the invention has the great advantage that, at the transition region between a profile and the angular profile, a continuous paneling ensures that there is no esthetically offensive transition present, without the need for extravagant machining. In principle, such an angular joint for a frame can also be realized in structural elements other than window frames of a motor vehicle door.

Abstract ABSTRACT OF THE DISCLOSURE

An In an angular joint of a window frame of a motor vehicle door, which the window frame is formed, at least in one region, of a, particularly from at least one continuously cast aluminum profile, in which the profile. The at least one continuously cast aluminum profile is joined to an angular profile, and it is intended to be configured with simple means configure the angular joint simply, in an esthetically pleasing manner, and without disturbing seams. For this purpose, In such an angular joint, is distinguished by the fact that the at least one profile to be joined is the support for an external paneling, and that this the external paneling extends in the longitudinal direction of this the at least one profile at least into the far corner of the angular profile. The paneling, the profile and the support extending therefrom can be configured as a one-piece, integral part.